Jamaica Agricultural Society.

The more people do the more they can do; he who does nothing renders himself incapa of doing anything; while we are executing one work we are preparing ourselves for und taking another.

VOL. XXI. MARCH, 1917. No.

BOARD OF MANAGEMENT.

The usual monthly meeting of the Board of Management was he at the Office of the Society, 11 North Parade, Kingston, on Thursda 15th February, 1917, at 11.40 a.m. Present: His Excellency S Wm. H. Manning, K.C.M.G., C.B. (presiding), Sir John Pringl K.C.M.G., Hons. P. C. Cork, C.M.G., D. Campbell, S.S. Stedma R. P. Simmonds, Messrs. R. Craig, A. W. Douet, Jas. Dougall, A. V Farquharson, H. Q. Levy, A. C. L. Martin, Conrad Watson, Rev. V T. Graham, and the Secretary, Jno. Barclay.

Apologies for Absence.—Apologies for absence were present from Messrs. Adam Roxburgh and W. Woolliscroft.

Confirmation of Minutes—The Secretary pointed out certain sligl alterations in the first printed copy of the minutes sent out with tl Agenda, cheifly consisting of printers' errors. A revised copy wa before the Board. This was taken as read and confirmed.

Statement of Accounts.—The usual monthly statement was pr sented.

Notices of Motions—The Rev. W. T. Graham gave notice tha at the next meeting of the Board, he would move the following resolu tion:

"That the Board of Management of the Jamaica Agricultural Society expres its opinion that the special circumstances affecting the interests of the West Ind that need to be considered at the proposed Imperial Trade Conference, are such require direct representation at the Conference, and hereby r.spectfully asks c island Government to initiate such efforts as may secure from the Imperial Gover ment the valued privilege of direct representation for the West Indies at the pr posed Imperial Trade-Conference."

The following matters arising out of the Minutes of the previo meeting were considered:—

(i) *Mr. Dewar's Resignation.*—The Secretary said that at t last meeting of the Board Mr. Dewar had sent a letter resigning l position on the Board. He (the Secretary) suggested that the vacan be not filled as the next triennial election was due to take place in Jul This was agreed to.

(ii) *Panama Disease.*—The following letter from the C.S. was read:—

No. 2159-2074. 14th February, 1917

I am directed by the Governor to transmit for the information of the Board Management of your Society, the accompanying copy of a memorandum by t Director of Agriculture with regard to certain statements made by the Honoural S. S. Stedman at the meeting of the Board of Management on the 17th January, 19

The Secretary said the memo was a long one replying to several of Mr. Stedman's statements in detail.

It was decided to refer the papers, together with two letters which Mr. Stedman submitted, to the Committee which the President was to appoint to go into the whole matter.

(iii) *Banana Borer*—The C.S.O. letter, No. 1832-1891, dated 7th February, 1917, was read, covering memo from the Director of Agriculture as to the steps taken in St. Catherine to comply with the requirement of the Order *re* Banana Borer. The memo stated that all the owners of properties in St. Catherine had taken steps to comply with the Order, except two, and these two were willing to do so, but owing to shortage of labour were unable to start.

The Secretary was directed to ciculate the papers, as usual, to the Board of Management.

(iv) *Pimento Scale.*—The Secretary said there was a report from the Entomologist on the discovery of the Scale in St. Ann, but as there were other matters in that report for the consideration of the Board, he had given the report a place on the Agenda, and the whole might be considered when the item was reached later on.

(v) *Coconut Disease in Portland.*—The Secretary said that as instructed at the last meeting he had forwarded to the Director of Agriculture a copy of the letter from the Hon. H. Cork, having reference to diseased coconut trees. The Director of Agriculture had replied, asking that an Instructor be sent to visit the place and report on the matter, as the Inspectors of Plant Diseases were otherwise busy and the report of the Instructor would assist him in dealing with the matter. The subject had been considered by the Instructors' Committee that morning, and they found that an Inspector of Plant Diseases had been in W. Portland the previous week and could easily have visited Nonsuch Estate, and as they had been advised that the Microbiologist would be travelling by motor car in West Portland on the 19th inst., he could visit Nonsuch Estate much more easily than the Agricultural Instructor, who, to go promptly, would have to alter his Itinerary, and travel a greater distance.

The President said that the Secretary should advise the Government of this immediately so that the Microbiologist could be instructed accordingly.

The Secretary also reported that at the Instructors' Conference held in January, the Instructors had mentioned that on their rounds they often discovered cases of diseased coconuts, but not having the powers of Inspectors of Plant Diseases, they could not deal with them. It was decided, however, that any such cases should be at once reported The result was that now the Secretary had received reports from several of the Instructors on cases which they considered required attention. Mr. Stedman suggested that extracts from the Instructors reports on specific cases like these should be forwarded to the Director of Agriculture, and the Secretary was directed to act accordingly.

(vi) *Industrial Alcohol.*—The Secretary said that, acting on instructions received, he had communicated with the Director of

Agriculture and Mr. Dougall in the terms of the Minutes of the las meeting. He read the reply of the Director of Agriculture, whic was as follows:—

Department of Agriculture,
Hope, Kingston P.O., Jamaica,
7th February, 1917.

In reply to your letter of February 6th, as to the manufacture of Industrial Alcohol in Jamaica in place of Rum, I should prefer not to be placed on the Committee to report to the Board on this matter, as I should probably be called upon to advise the Government if any practical steps are suggested involving Government action.

So far as my information and knowledge extend there would be no present advantage from rectifying our Rums in Jamaica, although this could be easily done in England if Rum were unsaleable as such. I am informed of large advance sales of Rum having recently been made in England at remunerative prices for the 1917 crop, and it would appear that we are just as likely to be able to ship and sell Rum as Industrial Alcohol during the coming crop season.

It would never pay tor replace our present distilleries by Patent Stills in order to meet the present difficulties which should not extend over any very long period.

Jamaica Rum contains from 200 to 600 parts of Ethers and to obtain a silent spirit from this, the spirit would require to be saponified previous to distillation. We frequently do this at the Government Laboratory and a very good rectifide spirit can be produced. I am, however, persuaded that it would be far more economical to consign our Rums directly to the English Rectifiers than to deal with them at a Central Establishment in Jamaica under present conditions, and considering the capital outlay and expense involved. The Imperial Government would doubtless afford preferential freight for Rum from Jamaica if it was desired for use in the manufacture of munitions.

The manufacture of second sugars in all the larger factories is calculated to relieve the Rum situation to an appreciable degree. I suggest that this matter might be sent to Mr. Dougall and the Committee appointed to deal with this question, with the assurance that I should be happy to give the Committee any information on any technical matters referred to me.

(Sgd.) H. H. Cousins,
Director of Agriculture & Island Chemist'

Mr. Dougall said that in his experinece in Cuba large quantities of alcohol manufactured there sold at 30 cents a gallon. He agree with Mr. Cousins.

The Secretary said that that was in pre-war days—they wer now considering a probable period of emergency; his informatio was that Industrial Alcohol was selling at 7/- a gallon in the Unite Kingdom, which would nett 5/- here, and that it was wanted; whi as he had stated at the previous meeting our rum was not an essenti and might not be wanted. He understood that rum was offerin locally at 2/- and 2/3, and that such large stocks were held that ne bonded stores would require to be erected.

The President said that although the subject might not be deal with further at present the information was useful and should b recorded.

(vii) *Orange Oil.*—(a) The following letter from the C.S.O. wa read:—

No. 1137-19578/16. 24th January, 1917.

In continuation of the letter from this office of the representations of the Jamaic Agricultural Society as to the lack of attention to cases of adulteration of orange oi which have been brought to notice, I am directed by the Governor to acquaint yo for the information of the Jamaica Agricultural Society that the Inspector of Polic for Manchester reports that since the case referred to in the "Gleaner" of the l

police, and that on the 11th December, 1915, he issued a district order to the police on the subject, a copy of which is enclosed, as he fully recognized the importance of this ndustry to the island.

"Mr. Alexander adds that your letter, C.S.O., No 104, of the 23rd ult., paragraph two, was the first intimation he had of the case mentioned therein, and that he saw the Clerk of the Courts who informed him that sometime ago a dealer in produce did ask him about the adulteration of orange oil, but as the dealer had not secured the oil, the evidence adduced was not sufficient for any action to be taken, and the Clerk of the Courts so informed the dealer."

(Sgd.) ROBT. JOHNSTONE,
Actg. Colonial Secretary.

District Order to the Police issued by Inspector T. Alexander.

D. O. No. 17. 11th December, 1915.

Instances having recently come to notice where Orange Oil has been adulterated with Kerosine Oil, I have to direct that the Police at Out-stations occasionally secure samples of such Oil where there is reason to believe that such Oil has been adulterated by unscrupulous persons. I need not point out that if this practice continues it will seriously affect the well-being of the Colony.

Sub-Officers must visit all p laces where this Oil is being purchsased, and let the parties be madel aware of the instructions the Police have received on the subject. Send me a specia report when this order h as been complied with.

(Sgd.) T. ALEXANDER,
'Inspector.

The Secretary also read letter from Mr. H. E. Lewis of Newport, on the matter:—

February 13th, 1917.

I duly received of 29th ulto, and note what you state *re* the case of adulteration of sweet orange oil exported by me some little time ago. I seized the 2 bottles adulterated oil in question and took them before the Clerk of the Courts with a view to having an action against the man, but was informed I could not deal with the man under the existing Law. I also represented the matter to the police, but I was given no grounds on which I could take action, and the matter ended there.

I do not, however, wish to labour the point, nor that these officers should be queried, but simply that steps should be taken by the Government to protect the dealers in this article (which has become an important industry) against adulteration. I may mention that I have since had two more cases of adulteration with Kerosine Oil.

(Sgd.) H. E. LEWIS.

Mr. Stedman thought that the matter was very important and that, under the circumstances, the Government should be asked to request the Police and the Clerks of the Courts to instruct parties under what headings to procee,d in order to bring offenders to justice.

The Secretary was instructed to write the C.S.O. on these lines.

(viii) *Economic Conference of Allies.*—The report of the Special Committee appointed at the December meeting of the Board of Management was presented. The President said that he had not received copies of the resolutions to consider and it was very necessary that he consider the report before it went forward to the Legislative Councfl. He would not be present at the next meeting, and the matter would be discussed by the Legislative Council at this Session.

The Secretary said that he had sent copies of the resolutions to each member of the Committee and had advised each other member of the Board to refer to the *Gleaner* of the 31st inst. where all the resolutions had been published. Unfortunately, His Excellency had not been advised.

As the matter was considered of urgent importance, it was decided to hold a special meeting to consider the report, and the 1st I[illegible] at 11.40 a.m. was fixed.

(ix) *Bananas for Shipment.*—The following letter from the C.S.O. was read:—

No. 740-842. 16th January, 1917.

"I am directed by the Governor to inform you that he would be glad if your Society, through the Branch Societies, would assist in obtaining statistics as to the number of bunches of bananas, and the amount of other produce which would be available for shipment beginning with the month of May until the end of the current year. This information is more particularly required in respect of the smaller cultivators, as it could be obtained from the larger proprietors on individual application if necessary.

(Sgd.) ROBT. JOHNSTONE,
Actg. Colonial Secretar.

The Secretary said that he had made enquiry on the subject some time before and he had got replies, but he expected further information and he would be able to report as soon as this arrived.

As arising from the last Half Yearly General Meeting, the following matters were dealt with:—

(1) *Woodpeckers.*—A letter was read from the C.S.O., No. 1506-1018, dated 15th February. 1917 stating that His Excellency had caused both the Government Entomologist and the Superintendent of Public Gardens to undertake an investigation of the food of the Woodpecker by monthly examinations extending over a period of one year, with a view to determining whether or not the bird causes damage to cocoa pods as had been alleged

(2) *Illustrations for Journal.*—The Secretary said the matter of illustrating the JOURNAL had been brought up over and over again. It had been repeatedly pointed out how huseful such illustrations were for the articles. He suggested that, as a beginning, they might insert some, which would probably not cost more than 10/- or £6 per annum at most.

It was decided that the matter should be left to the Secretary to make what arrangements he could within the allocation for printing the JOURNAL.

(3) *Branch Notes.*—The Secretary said that this question was one of the everyday troubles of his life. It had been discussed at the Half Yearly Meeting, but he did not see how it was to be remedied. The JOURNAL was running from 40 to 45 pages and there could not be an increase of pages allotted to Branch Notes, without a compensatory decrease in the reading matter.

It was agreed to leave the matter to the discretion of the Editor.

(4) *Free Postage.*—A letter from the C.S.O. No. 1339-850, dated 27th January, 1917, was read saying that His Excellency approved of Agricultural Instructors enclosing a "franked" envelope in any letter to a Branch Agricultural Society to which a reply was expected in order that such reply might be enclosed in the franked envelope and conveyed free through the post, and that the Postmaster for Jamaica had been informed accordingly.

(5) *Free transport of Stock.*—The Secretary read letter from the C.S.O., 2060-1308/17, dated 13th February 1917, covering memo from the Director of Railway, stating why it was impossible to transport stock free by rail, as follows:—

"A purchaser of stock who lives in, say Morant Bay, would have to pay the removal expenses, I presume the Government would not dream of doing so. Wh— therefore, should a purchaser, who is served by the Railway get his stock convey free by the Railway?

The man in Morant Bay is not only paying for the transportation of his own stock, but is also being called upon to contribute to the transportation charges of the stock of the man along the railway, as General Revenue has to pay any deficit between the net profit and interest charges.

The fact that the Railway conveys plants from the Agricultural Department free of charge cannot, I submit, be taken as a precedent for similar conveyance of live stock, as plants can be loaded in the same car as merchandise and do not require a special car. In cases where it cannot be avoided, they need not necessarily be taken to destination the same day as is required with live stock.

I, therefore, do not recommend granting free railway transportation of stock from Hope Government Farm. I think it would be a great mistake to do so.

(intd.) S.C., 3rd Feb., 1917.

The Secretary said that the matter had come before the Half Yearly General Meeting on a resolution from the Sav-la-Mar Branch, but he did not think that the other Branches were very particularly interested in this.

The Board agreed that the depositions of the Director of Railway were sound.

(6) *Change of Meeting Day.*—A letter from the Alexandria Branch was read with resolution as follows:—

7th February, 1917.

At the monthly meeting of the above-named Branch, held on the 2nd inst., the following resolution was adopted:

"That whereas a good many Branch Societies are represented at the Yearly and Half Yearly Meetings by teachers who find it inconvenient to attend on Thursdays the Managing Committee be respectfully asked to fix these meetings for Fridays in the future."

(Sgd.— D. THEO. WINT,
Secretary.

The Secretary said that this also was one of the often discussed matters, and that it had been long since decided that the day most generally suitable was the third Thursday. He was instructed to inform the Alexandria Branch accordingly.

Sulphate of Copper.—The following letter from the C.S.O. was read:—

No. 830/467/17. 18th January, 1917.

I am directed by the Governor to acknowledge the receipt of your letter C.S.O., No. 110, dated the 28th ultimo, and to acquaint you for the information of your Society that the Director of Agriculture has been instructed to obtain and stock a supply of Sulphate of Copper for sale by his Department to planters for use as an insecticide, for agricultural purposes.

(Sgd.) ROBT. JOHNSTONE,
Actg. Colonial Secretary.

This was considered satisfactory.

Visit of Entomologist to St. Ann.—The following letter from the C.O.S. was read:

No. 1970-1425 10th February 1917.

I am directed by the Governor to transmit for the information of the Jamaica Agricultural Society, the accompanying copy of a report by the Entomologist on a visit which he recently paid to the Parishes of Saint Ann and Saint Catherine, together with a copy of a letter which had been previously addressed to Mr. Adam Roxburgh by the Director of Agriculture, containing advice as to the control of an outbreak of flies which were attacking cattle on his property.

(Sgd.) ROBT. JOHNSTONE,
Actg. Colonial Secretary.

The Secretary was directed to circulate the papers to the Board.

Food Supply.—A letter was read from the Royal Society London as follows:—

It has been suggested to the Food (War) Committee of the Royal Society, whic acts in an advisory capacity to the Ministry of Food that Bananas, Sweet Potato and Cassava would be available for shipment in considerable quantities, and th Committee would welcome any information you might be willing to offer them i this connection.

I would specially draw your attention to the following questions:—

1. What supplies of Bananas and Sweet Potatoes are available?
2. What plant would be needed to produce a considerable supply of Banana Figs?
3. At what price could Banana Figs and Sweet Potatoes be put on board ship ?

(Sgd.) W. B. HARDY.

The Secretary said that he had communicated with severa gentlemen on the subject, and had received memos from the Directo of Agriculture, Hon. P. C. Cork and Mr. F. G. Sharp.

The Director of Agriculture in his reply said that he thought that better plan would be to save the consumption of wheat flour by makin war bread. He had samples of bread made by W. E. Powell & Co containing 25% of cornmeal, which was quite good. This, he saic would save importing 50,000 bags of flour per annum, which coul be thus diverted to the United Kingdom.

The Secretary said that this was good so far as it went. H had already brought the matter of War Bread before the Board i connection with the hurricane of 1915. He had also had War Brea made recently at two bakeries in Kingston—the Co-operative, an that of Mr. David Vaz—containing 15, 20, 25 and 33% of cornmea and he tabled samples.

It had been estimated that the bread containing 25% of cornmea would enable 2 to 3 ounces more to be sold for 3d.

The President said that the information was useful, but that h did not think that war bread need be made compulsory at present.

The Secretary read letter from Mr. F. G. Sharp stating that i anything was done in the matter he would agree to grow a certai quantity of Sweet Potatoes, and deliver them at Chapelton Railwa Station at 70/- a ton.

The Secretary said that from estimates he had already obtainec we were not likely to have enough bananas to ship to the Unitec Kingdom at all, if the United States took their ordinary supply, bu they would have a very large number of small bunches which woul be of no use for export. The meeting was of the opinion that Banana Figs would require special dryers and special experience and skil to manufacture and that it would be easier to make dried Banana chips.

The Secretary suggested that he should be authorized to shi samples of sweet potatoes and banana chips to the Royal Society This was approved of.

As the matter was considered of importance a special Committe was appointed to meet to consider the whole subject and report to the Board.

The Committee consisted of Hon. P. C. Cork, C.M.G., Chairman Hons. R. P. Simmonds and S. S. Stedman; Messrs. A. C. L. Martin, H. Q. Levy and A. W. Farquharson.

Meantime the Secretary was directed to secure all the statistics he could *re* the amount of products of all kinds which would be available either for local use or for export.

American Consul.—The American Consul wrote asking for reports on Crops, and any such information as might be of service to the farmers and people of his country.

The Secretary was dirrected to provide these reports.

Authorized Persons.—Mr. J. H. McPhail, Bog Walk P.O., recommended Emanuel Mattadean for appointment as an Authorized Person for the district of Magazine. This man had, however, been appointed once before, but his name had been struck off the list as he proved to be undesirable.

The Secretary was instructed to inform Mr. McPhail on the point.

War Gifts.—The Secretary reported on the 40th and 41st shipments of War Gifts sent forward since the last meeting. The details were being published elsewhere in the JOURNAL, and have already appeared in the Newspapers. He also presented acknowledgments from the Warships in the harbour and from the Contingent Camp of gifts of fruit sent them.

Applications for Affiliation.—(1) *Tower Hill.*—Affiliation was recommended by the Instructors' Committee after due consideration, and was granted.

(2) *Merrywood.*—This Society is near to Mulgrave, and the Committee did not recommend its affiliation at present, without further investigation.

(3) *Turks Island*—The Secretary said the Instructors' Committee was rather in favour of affiliating this Society, though they thought that there would be some difficulty and increased expense in forwarding JOURNALS to so many.

The matter was referred back to the Instructors' Committee to consider details and report.

Instructors' Reports, etc.—The Instructors' reports and itineraries for January were submitted and directed to be circulated to the Instructors' Committee as usual.

(b) *Arrangements for Enlisting.*—The Secretary reported that there were three Instructors who were desirous of enlisting in the Contingent. Two had families, and consequently they wanted to know if the Society would provide for their families whilst abroad. The Society had no funds for this purpose and the Instructors' Committee thought the matter should be brought before the Board.

The President said special provision was made at the Railway for the families of men who went with the Contingent. He would be prepared to grant special allowances to the families of these two Instructors, but the matter would have to be first brought forward in the Legislative Council.

The Secretary was directed to bring the matter before the Government to be dealt with.

New Members.—The following new members were elected:—

Frank Richardson, Christobal, Canal Zone.
Mrs. Lyon Hall, 112 East St., Kingston.
M. H. Smith, St. Ann's Bay.
H. J. Feurtado, Temple of Fashion, Kingston.

The meeting adjourned until March 15th, 1917, at 11.40 a.m.

JAMAICA AGRICULTURAL SOCIETY.

THE SWEET POTATO.

The food crisis in Europe and America, with its reflex action in Jamaica, calls for serious thought at the present time, and as every effort is being made to increase production here, not only for home consumption, but with the hope of obtaining a sufficient quantity of exportable foodstuffs for shipment to England, it may not be out of place to put forward a few suggestions in one of the most important of our quick producing catch crops.

The sweet potato is grown in every parish of the Island, and of the many varieties in Jamaica, with names innumerable and each variety named according to the place from which it came, or the person introducing it; such as "Port Maria" and "Sharp", there are 2 kinds which seem to stand out above all others, both as regards their prolificness, keeping qualities and early maturity—one variety, known as "Flour Barrel" can be eaten as early as 7 weeks after planting, and in the Above Rocks District of St. Catherine is known as "seven weeks"; at 10 or 12 weeks it is at its best, and if carefully lifted will keep for 3 or 4 weeks.

The other variety known as Tower Hill is also a good yielding potato, matures in 12 weeks and keeps for 2 or 3 weeks, with proper handling.

In view therefore of possible shipments abroad, there two varieties would seem the best kinds to be planted. Sweet Potatoes thrive best in rich soils, especially clays, that are mixed with loam, and if banks are made 4 feet apart and the slips planted every 12 inches, care being taken to use the slips nearest to the bulbs and roots, and not allowing any of the leaves to remain on the slips, firming down carefully the one or two "eyes" covered, the yield will sometimes be 12 to 14 tons to the acre.

Just now potatoes are worth 8/- or 10/- per cwt., but they give a handsome return at 4/- even with a very ordinary yield.

If the large planters would take up this matter, and by the use of implements cheapen the cost of production; and the authorities guaranteed the purchasing of their potatoes at a fair rate for a given time, they would find the cultivation of this product far more profitable than bananas, or indeed almost any other crop. Planters should be carful however not to plant twice on the same spot, as experience in St. Catherine has shown that snails are likely to destroy the greater portion of the plants. (This phase of the subject will be dealt with at another time).

H. L. M.

Bog Walk,
26/2/17.

(The varieties of Sweet Potatoes called "Flour Barrel" and "Tower Hill", are both old varieties, originally grown in St. Andrew, the former in the Liguanea Plains and the latter at Tower Hill, which rises immediately above the Hope River, where it debouches on the Plains. They are not so prolific as some other varieties, but are quick [illegible]

BLACK FLY ON CITRUS TREES.

IN MOCHO DISTRICT.

Early in August of last year my attention was called to the con tion of the citrus trees in the Mocho District. On examination, found that there was hardly a tree to be found anywhere that w not infested with the Black Fly and every tree seemed alike infest with Black Ants. I then heard of Mr. Campbell's discovery that certain kind of Black Ant was a remedy for the Black Fly. I w puzzled, and referred the matter to the Entomologist who paid visit along with me on August 28th. If Mr. Campbell's observ tion was correct, here was a puzzle for him likewise. There w of course the possibility of these ants not being the same as tho on Mr. Campbell's property, and the entomologist promised to inves gate as soon as permitted. On the 2nd of February, of this year, again made a careful examination of the trees and to my surpri there was not a living Black Fly to be seen and the trees appear much healthier. The Black Ants had undoubtedly been on the tre before the Fly came. Is it not possible that the Fly being new the Ant, it took the latter some time to discover that the form was a delicious morsel, but having once made the pleasant discove no quarter was given the Fly thereafter?

S. A. SCHLEIFER,
Clarendon.

CITRUS BLACK FLY AROUND THE HOME!—We personally aske the Entomologist: "What would you say was the simplest wa for the private house holder with one or two lime trees or orang or grape-fruit in the garden to deal with the Black-fly pest?"

His answer to us was: "Spray with the following:—

One pound Laundry Soap dissolved in 4 gallons soft Water. Dire the spray on the UNDER SIDE of the leaves only, where the fly i The ingredients of this spray are convenient to everybody. Tur the garden hose on the trees strong a few days after the first sprayin and the sooty mould will wash off readily from the tops of the leave Badly infested trees will require persistent effort at first and wit the entire district infested the practice must be kept up and repeate when necessary. The trees answer quickly to treatment and los their dried-up blackened appearance."

ANOTHER BLACK-FLY "FRIEND."—A few weeks ago in con versation with the Entomologist, Mr. Ritchie, we made mention t him of a newspaper article on a new Ladybird beetle enemy of Whit flies which had been introduced into Florida to fight the White-flie there, from California where it preys upon and controls a local specie of white-fly. As the White-flies of Florida and California and ou Black-fly are all very near relations, we felt interested and foun that Mr. Ritchie was already in correspondence abroad on the subject Mr. Ritchie now writes us: "With regard to our conversation o the subject of *Delphastus catalinae Horn*, the White-fly eating Lady bird beetle, I have just heard from California and Florida. So fa Florida has but a few experimental colonies under observation at th Experiment Station at Gainesville and of course in view of the enormou annual loss to her citrus crop, due to th White-flies, hopes for th

best of this new friend. As the beetle multiplies at the St[a]
Gainesville, colonies will be sent out to growers over the s[tate for]
establishment in their groves.

Prof. Harry T. Smith of the State Insectary at Sacramento, Cal., in a recent letter expressing his interest in the Hon. Dugal Campbell's Ant Experiment (cutting from "Gleaner"), very kindl[y] offered to collect a colony of the Lady beetles and mail them to Jamaic[a] this coming summer, in order to experiment against the Black-fly. We need all the beneficial insects we can here and Prof. Smith wh[o] shipped the Lady beetles to Florida is now willing to come to ou[r] aid in Jamaica with his usual magnanimity.

I should remark that a local species of Lady-beetle, little large[r] than a pin's head and metallic green, already preys upon the Blac[k] Fly in Jamaica. It delights in the name of *Lioscynus diversipes, Ch* as determined by the Imperial Bureau of Entomology."

———:o:———

MOONSHINE OR FACT?

In the JOURNAL of December 1916, is an article which I hav[e] read with much interest entitled, "By the Light of the Moon."

As having a bearing on some of the things mentioned in tha[t] article I will state certain things that have come under my observatio[n].

Years ago I noticed in Florida that even in a dry period youn[g] orange trees would begin to "sprout," that is to say, the eyes or bud[s] would swell and a growth start just after the new moon. If no rai[n] came these would dry up and within one-eighth or one-quarter of a[n] inch in length.

In Cuba I noticed years ago that the dealers in timber alway[s] specified that it must be cut in the period of each month betwee[n] the full moon and new moon to prevent damage from "Borers." T[o] prove this, during several months I examined the trees by peelin[g] off the bark during the period after the new moon, "light night;" and during the period after the full moon, "dark night," and foun[d] always a very decided and appreciable difference in the amount o[f] sap, there being practically none during the strictly dark nights.

On several occasions I had logs cut and carefully marked durin[g] the light nights and during the dark nights of the same month. The[y] were then put into a yard where all had the same exposure. Whe[n] the proper time elapsed those cut during the period of light night[s] could be distinguished by the little heaps of sawdust or "powder dust" on the logs. It is generally supposed that the reason is that the sa[p] ferments and attracts the "Borers."

It is the custom in Cuba when possible, to put the logs cut durin[g] the light night periods in water for sufficient time to avoid the con-sequences named.

I have noticed in various places in the West Indies, as also i[n] Central and South America that Bamboo is placed in ponds or stream[s] for a period of time after cutting, in order to "season it and preven[t] Borers," as it is expressed in some places.

As to the things named regarding Beans, Corn, etc., as affecte[d] by the stage of the moon, I can only say that I have heard much of it and variations of this idea according to the country I live in, bu[t] have never seen anything to convince me that it was other than r—

BLACK LEG.

A correspondent writes us as follows:—

"I have always understood that Blackleg or Quarter-Ill was a lisease peculiar to cattle and did not attack sheep. Please let me mow if I am correct. Last week and again to-night, I had a case of young ewes showing absolutely indentical symptoms of Blackleg of cattle, a disease I am very well acquainted with. The common n which the sheep are fed, is a rich low-lying pasture, having only t present some 25 head of sheep and a few other stock. We have ot had sheep there until some 3 or 4 months ago. This common, believe, is infected with Blackleg. Kindly get advice for me and t me know at once what is the likely cause that I may prevent further sses."

* * * * *

We replied that the correspondent was wrong in assuming that eep were immune from Blackleg. Besides cattle, this disease also ttacks sheep, goats and guinea pigs, but seldom horses, asses, mules nd pigs, while dogs, cats, rabbits, rats and mice and man, are practically immune from the disease, at least to a certain extent.

Several other letters have been received about attacks of Blackleg. here is often some confusion between this disease and Anthrax, we give the following notes on the subject:—

A good deal of confusion often occurs in deaths of cattle as to hether the deaths occur from Black Leg or Anthrax.

Anthrax is a specific disease included in the Contagious Diseases nimals') Act, and is under strict Government regulations, but so r Blackleg is not included. It would seem reasonable to apply to lackleg, however almost the same regulations as to Anthrax, as has been one in several countries especially on the Continent of Europe. ome of these special measures should be compulsory, especially against e use of the carcass for food; prohibition to use the dead body at l with the exception of the skin, compulsory burning or burying ft. deep in the soil, and covering with lime.

The symptoms of Blackleg are usually plain, but sudden deaths cattle or mules, especially the latter, should always be looked upon ith suspicion, and reported to the Director of Agriculture, Kingston. lackleg, sometimes called Quarter-ill, is clinically distinguished from nthrax by its characteristic crackling caused by gas contained in vellings which usually occur in the thighs, which crackling never curs in Anthrax. Blackleg is not infectious but is due to a germ ich exists in the soil, and which must enter the system through me break in the skin, otherwise a wound, however slight. Anthrax, the other hand, is very contagious, and may pass from one animal another by simply being in the same pasture where other animals ve been feeding, often by inhalation of the breath, by rubbing ainst any animal, or licking the skin, if that animal has the germs Anthrax in it. Blakkleg is such a malignant disease, and its urse is so acute, that treatment is generally out of the question, hough there have been cases of cure. The best means of comting Blackleg is by Vaccination with Blackleg pellets.

Pastures where cases of Blackleg have occurred, should if possible shut up except for animals immune, and cattle 4 years old and wards, like working stock. Blackleg has a very rapid course which

with few exceptions, ends fatally in from 1½ to 2 days, its character tics being a rapidly increasing temperature as well as a swelli on the body which also develops rapidly and crackles on bei touched. These swellings may appear in different parts of t body, but are found chiefly in the upper parts of the thigh, the nec shoulders, and lower regions of the chest and loins. They nev appear below the hocks and knees. In a short time the swellin become cold and no pain is felt by the animal even when an incision made into them, in which case, a dark red frothy fluid of disagreeab smell flows from the wound.

The chief symptoms are as follows:—Sudden suppression of t appetite and general internal derangement, temperature up to 1 degrees F., lameness, stiffness of movement, swelling of muscles a tissues. Breathing becomes accelerated and difficult, and the anim groans, and is sometimes seized with violent colic. Death occu almost invariably after the disease has lasted from 1½ to 3 days.

———:o:———

HOG LICE.

We received a communication from Mr. Cradwick, Agricultu Instructor, with regard to a number of pigs that were badly affect with lice that spraying did not have any effect on. We found th the pigs were kept in a crawle or pen of wood-work which were ma up of round sticks with loose bark, and the house was thatched. is plain therefore, that after spraying re-infestation was sure, as t bark and thatch formed breeding places for the lice. Specimens the lice were sent to the Entomologist, and the following is his report:-

HOG LICE from Little Grays Inn, Buff Bay. (*Inquiry No. 838.*)

TREATMENT.—

A. Apply by means of a sprayer, or brush, or hand-rag su solutions or preparations as the following:

(1) Kerosene Emulsion, 10 per cent.

(2) Florida Citrus Spray, one part to five parts water.

(3) 1lb. rancid grease, lard or butter, in which ½ pint of kerose is mixed thoroughly until a creamy mass is formed. Tobacco decc tions, emulsions of Jeyes, soap, and hot water, etc., will also do well.

Repeat treatment in about ten days to destroy any nits or eg which may have hatched out since first treatment.

B. When hogs are affected with lice they will be noticed to continually scratching themselves against posts, etc. This habit h given rise to the mechanical device known as the automatic "HC OILER", many makes of which are now on the American market reasonable prices. The hog on scratching itself against this me post liberates so much crude oil upon itself—this killing the lice wi which it comes in contact. A good "Hog-oiler" can be made at hor by warping several plies of pack-sheet, or felt, or burlap around post firmly driven into the ground and periodically saturating th with crude oil. A thick crude oil is better for this purpose than t thinner shop kerosenes sold for illuminating purposes. The hogs w very soon begin to appreciate the intention of the erection!!!

C. To those who have sufficient hogs to warrant it, nothing bea a properly constructed hog-wallow of concrete for the control disease and external parasites. If a wallow is maintained and charg with a fluid which will act as a disinfectant, deodorant, and insecticid

6′ x 8′ x 1′ inside measurement is convenient, small, and costs but little. The gain to the health of the hogs is incalculable. They will always appear slick, healthy, and ready for food. Just as the dipping vat is nowadays THE thing for keeping of cattle in A1. condition so one should look upon the sanitary hog-wallow of concrete as a highly necessary adjunct to the farm outfit for the MAINTENANCE OF HOG HEALTH! (Specification on inquiry.)

D. Rake up and burn all straw or bedding about the infested hog-pen. Avoid rough lumber and posts with loose bark, seams, or cracks where lice can lodge.

White-wash the pens and sleeping quarters thoroughly, adding 1 pint of Crude Carbolic Acid to each 4 gallons of white-wash, or stronger.

Lice are very often noticed on poor runty hogs. This, however, does not signify that lice prefer such animals but possibly rather that the lice have multiplied rapidly and in consequence the hogs have become emaciated and unhealthy, and in neglected cases running sores develop.

LOUSY HOGS DON'T PAY!!! CLEAN UP!!!

ARCHIBALD H. RITCHIE,
Government Entomologist.

5/3/17.

No amount of spraying would get rid of lice in the bark of wood or in thatch, so that burning the whole place down was the best advice to be given. If making kerosene emulsion is very difficult, paranaph which is made at the Government Laboratory and can be had from there or from the hardware stores in Kingston or from us, makes a handy wash to get rid of lice on animals.

———:o:———

COCOA TREES.

RESULT OF PROPER PRUNING.

(*Extract from Report of A. P. Hanson, Agricultural Instructor for St. Andrew and Eastern St. Thomas.*)

Results.—Among the gratifying results observed during the month may be mentioned the following:—On Mr. Richard Barnet's holding, Aeolus Valley, is an average cocoa tree on which I demonstrated on a previous visit. This tree was till then so unproductive that the owner decided to cut it down. On the 24th we numbered no less than a hundred sound pods on this tree.

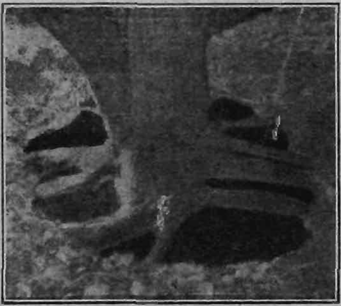
Mr. Houslin of Somerset, St. Andrew, was able to point out to me two large cocoa trees which yielded 10/6 last crop.

(*Extract from Report of E. A. Gunter, Agricultural Instructor West Portland.*)

Eden.—Visited and demonstrated on holdings of W. E. Gray and E. E. Gray in cocoa pruning. On advising Mr. Gray to expose the roots of the cocoa trees, he mentioned his having two tangerine trees, one with the roots exposed and the other with roots covered deeply. From the tree with roots exposed he sold over 10/- worth of fruits, picking over 1,000 fruits. The other tree had very few fruits and were of far inferior size and quality.

(We have often stated in this JOURNAL that a chief cause of unthriftiness of cocoa, orange or other economic trees, is through their being choked at the neck by dirt. This is caused by planting trees too deeply at first, or through weeding to the trees and then getting dirt heaped up around the trunks. Trees should be opened up at the neck, and we give an illustration of the length this opening up has been carried in Spain in order to save oranges trees from different troubles, principally root rot and citrus canker. Our trees do not need quite so much opening. As many troubles begin with the tap-root, this is cut right away and the cut surface tarred.)

:o:



CURIOUS FACTS (?) GLEANED ABOUT PUMPKINS THIS MONTH.

(Extract from Report of L. A. Wates, Agricultural Instructor.)

The only way to get these to grow and bear well is to follow one of the following plans:—

(1) Always plant with a belly-full.

(2) Always sit down place, a stone on the head and plant so.

(3) Always plant just when leaving the ground at night or else the pumpkin will run all about and not stop steadily and bear.

(4) Pick off all the blossoms that first come and carry them to the kitchen fire and burn them, the next lot of blossoms will all hold fruit.

:o:

AN EXEMPLARY SMALL SETTLER.

(Extract from Report of J. Briscoe, Agricultural Instructor, for West Central District.)

I should like specially to mention the cultivation of Mr. S. Carrol, it is a striking example of what can be done with not even first class land by hard work and progressive methods, it is a pride and profit to its owner and I need hardly add a joy to an Instructor.

He has about 8 acres of cane bearing very heavily with guinea grass planted through the intervals, this he keeps clean with his canes. His mules are stabled in a floored stable during the day and fed with the guinea grass grown in his canes. The manure is thrown together with ashes and other rubbish into a pit made for the purpose and allowed to decay. He carries the manure to the ground in hampers on his mules, his forethought and ingenuity are evidenced in the construction of these hampers, which are fitted with a trap door with hinges at the bottom; arriving at the desired spot the trap door is unfastened and the manure falls out without the trouble of unloading the hampers. He has a good cane mill and covered-in works, but he is contemplating the purchase of a small 4 or 5 horse power engine and a new mill as he intends extending his cultivation.

He made 22 kerosene tins of sugar from one square chain of land. which he sold at 6/- per tin. This result shows the value of manuring cane.

He also grows a fair amount of ground provisions. What this man achieves is quite possible of achievement by other small settlers. but unfortunately neither example nor instruction has made such cultivations common.

—:o:—

PRÆDIAL LARCENY.

A correspondent, who is a J.P., and who lives in a backwoods district, where there are numerous small settlers, and others only renting lands, writes strongly on the subject of Praedial Larceny He says:

"To hear cases tried in Court, one would imagine that the sufferer was guilty in some way or other, not the law-breaker! I believe that the only cure for Praedial Jarceny is to make the thief restore three or fourfold the value of the things stolen to the owner. The thief should work under Government supervision and be paid for his work less the cost of his keep so that the owner of the stolen goods might be refunded.

"To get owners to grow food products there should be a Government guarantee that the grower of the foodstuffs should reap what they sow."

(We replied that this Society had sent a report to the Government in 1914, which contained recommendations, carefully drawn up by a Special Committee, after all the Branch Societies had been asked to discuss the subject and give their opinions. The feeling was that the only way to deal with Peaedial Larceny was for the Government to have settlements on some of the Crown Lands, where crops could be grown commercially, and after, say a third offence, the praedial thief would be confined for a certain term and compelled to work in agriculture. As most of the foodstuffs necessary could also be raised the cost of prisoners should be little. The prisoner would be credited so much a day for his labour, from which the cost of his keep would be deducted first, so that when he was set free on probation he would have some money to start him off. The Government could advance the cost of the stolen articles, and the cost of these could also be debited to the prisoner. No elaborate buildings on such a Prison Settlement would be necessary, and the cost of supervision should not be great, as the prisoners would not be dangerous criminals.)

There was also a further recommendation that those prisoners

CO-OPERATION.

The most difficult thing in connection with our work has be to organize co-operative efforts, especially in connection with the s of products of small settlers, and the purchase of things needful 1 the holding. However small, a beginning has now been made. Th is a co-operative coffee scheme in operation in St. Ann, this coffee seas for the first time, and we hope that the financial results will pro successful even under the difficulties exp^rienced, of the storm August, and the continuous wet weather du .g crop time. From t pen of one of our Instructors is the following outlining the first yea efforts of another such organization. We are encouraged to belie that our gospel of self-help is beginning to bear fruit, this socie being entirely the result of local combination.

THE KING'S CO-OPERATIVE SOCIETY, WHITE HOUSE.

This Society in connection with the White House Agricultu Society has completed one year of a successful business life, and full of promises for a rapid development in the future as its usefuln becomes more known.

I might have written long ago about this Society as a refutati to the statement that co-operation was not encouraged by the Bran Societies, but while the venture was still in the experimental sta I kept silent. Now that the thing is an undoubted success, it is r intention to start one of these Societies in every convenient cent of my district.

The objects of the Society are:—

1. To encourage saving habits among people.
2. To provide sums of money as loans at easy interest and easy conditions of repayment.
3. To prevent the sacrificing of agricultural produce at no paying prices.
4. To bring about independence, and to start Bank accounts f people who could not otherwise do so.

The idea of starting this Society at White House was on t minds of members of the Branch for months, during which time it w thoroughly discussed at the branch meetings, all the *pros* and *cons* bei considered and carefully weighed. The Society as it stands to-d is a cross between a Loan Bank, a Building Society, and a Savin Bank. One share is valued at £8 8s., and is payable in month instalments of 2/-.

Shares are *withdrawable*. This has been pointed out to me the weak point of the whole business. But in reality it is a stro point in our favour. Why should a man not get his money when l needs it, provided he gives due notice? This Society has no intenti of borrowing moneys from the Government or any one else, therefor it needs never look upon its share capital as security.

Interest is paid upon shares thus withdrawn if they are over tw years old.

When a share is matured, that is when the full £8 8s. is paid in l instalments, it is worth £10, and profits added if there are any.

Moneys are loaned on landed security, or if the sum borrowe be not more than £10 on personal security by means of bills of exchan

The interest charged is 10%, and is payable quarterly.

There is a committee of management known as the Directors, and they consider each application sent in.

Below I give the figures showing the amount of business done during the past year:

The Society started in February, 1916, with 32 shares. During the year it has grown to 78 shares.

By subscription to shares the Treasurer took......	£64	12	0
By Entrance Fees..........	1	19	6
By Fines..........		4	1½
By interest on Loans..........	3	19	6
By Loans Repaid..........	16	0	0
	£86	15	1½
Loans granted for the year..........	£82	0	0

These loans have been for a variety of uses. They were particularly useful in preventing shareholders from selling produce like corn, pimento, etc., at small prices.

During the logwood craze, too, funds were provided for the poorest to have his wood chipped.

The new year promises great development. At the last meeting £8 4s. was paid up and a number of applications for membership were sent in.

The members have been very regular in their payments, and the item of fines represents two or three delinquents, who have nevertheless paid up their obligations.

R. C. SOMERVILLE.

:o:

SUGAR.

The average crop of sugar in the Island of Mauritus is 250,000 long tons a year, and most of it is made into White Sugar. It is stated that these high grade sugars produced in Mauritius, and also in Java, have been favourite sugars with the English people for all sorts of sugar manufacture, as well as for domestic use. The Mauritius crop of 1916 was 259,750 tons.

* * * * *

A new method of utilising molasses is to solidify it, so that it can be shipped in bags or in blocks. In Jamaica, we utilise molasses to make rum, and in Barbados, molasses is sold for export to Canada. In British Guiana, a proportion of molasses is used to mix with a portion of the fine bagasse, and the combined product is exported as a stock food—Molascuit.

Owing to the attempted revolution in Cuba which has very much affected the South Eastern parts, sugar in Cuba has had a decided setback. Cane fields have been burned, and factories have been stopped working. We have not, however, heard of any factories having been destroyed. Jamaicans have been rushing to Cuba to earn higher wages on sugar estates, where there is a great demand for labourers. A good many of them, however, who were able to get away, have had to return, and the condition of a good many is, at the time of writing, anything but satisfactory. However, the revoltion has been quelled, and business should return to its normal condition in a short time. The sugar business has also been

with by the burning and dynamiting of most of the bridges on the Cuba Railway.

Cuba very largely depends for its food supplies on its imports, and the chief duties are on imports.

* * * * *

In Porto Rico there has been a serious strike of labourers on sugar estates in some of the districts. At least five Central Factories had to close down, for a time, at any rate.

The out-put of sugar in Porto Rico was in 1915—315,000 tons. In 1910 it was 254,038 tons, and in 1905—121,125 tons.

A commission has been investigating the cost of sugar production in Porto Rico, and finds that it costs about the same as in Hawaii, and that it is about 1 cent. a lb. more than it is in Cuba.

The question of food supplies in that island became so acute that the Governor called a meeting of the planters, and asked them to set apart a portion of their lands for the raising of beans and other vegetables for home consumption. The Governor of Porto Rico stated at the meeting that the question of food supplies was getting perilous, and might at any moment become more severe. The prices were such that the poor man could scarcely live. The cost of bread, milk, meat, and other necessities was 50% above normal, and might be worse. It seemed impossible for planters to increase wages in proportion to the cost of living, and he believed it was up to them to reduce that cost. The growers apparently could not arrive at any definite plan for relieving the situation, and it was suggested that the Government would have to take up the problem. A motion which compelled planters to devote 5% of their lands at present under cultivation, to growing food crops, was set aside.

The cost of living could be materially reduced in Jamaica by every planter growing some food crops. Praedial Larceny is feared but if corn, peas and sweet potatoes which are all quick growers were being grown everywhere, the attacks of our worst agricultural pest, the praedial thief, would probably be so much distributed that the loss would not be so much felt as at present. We see many abandoned fields of bananas that should be ploughed up and put under corn.

SCIENCE AND SUGAR PRODUCTION IN HAWAII.

Although surpassed in actual sugar production, both by Cuba and Java, it is pointed out that Hawaii is in an unique position in regard to the output of sugar in relation to population; for whilst Java turns out but 97lbs. weight of sugar per head of population, and Cuba 2,300 lbs., Hawaii annually produces 5,500 lbs. per head. Further, whilst Hawaii produces 5 tons of sugar per acre, Java, with her superior climate and abundant supply of labour, produces 4½ tons, whilst Cuba can claim but 2 to 2¼ tons per acre. It is admitted, however, that these figures have to be viewed in the light of the fact that, whilst it takes all but two full years to produce a crop of sugar in Hawaii, the time varies in Java from 11 months to 15 months, and in Cuba it is usual to harvest the cane after an average growth of 12 to 15 months.

However, the fact is undeniable that wonderful results have been obtained both in combating natural difficulties of the climate and in dealing with insect pests, which have at times seriously threat-

before us points out, "The unique position of Hawaii in the pro of wealth per acre is due primarily to the most highly developed, organised, and long-continued application of science and business efficiency to be found in any large agricultural industry."

As is well known throughout the sugar world, this efficiency is mainly due to the fact that there are certain matters which the plantations, acting through their association have delegated to a central organisation, their experiment station, which is, in fact, but an arm of the industry itself.

———:o:———

NOTES FROM BARBADOS.—Crops have started—juice so far as I have heard sinks 10 Beaume. Muscovado sugar is higher in price than dark crystals at present. Syrup 1/0½ per gallon, molasses 10d. for Shipment.

We could do with some rain. December was dry. January gave some partial light rains which were very acceptable. February has opened dry and windy—cold at night. A place of *250 acres* with ordinary windmill, the 'Valley' about 3½ miles from city, brought recently at public competition £19,600—more than Golden Grove (£14,000) was sold for, more than "Goshen" or Salt Pond—all of Jamaica. The purchaser, Hon. G. Laurie Pile, is our largest landowner. It is said his nett profits last year were over £50,000. He did not then own 3,000 acres all told. I have never known such large profit figures as some I heard of last year. The papers openly said that two produce firms had cleared respectively £20,000 and £16,000.

———:o:———

WAR GIFTS FROM JAMAICA.

FORTY-FIRST SHIPMENT.

The following War Gifts have been contributed and shipped to the United Kingdom per the Jamaica Agricultural Society, during the fortnight ending 12th Feb.

Donor and Address.	Gift.	Destination.
Hon. H. T. Ronaldson, Newport	20 boxes Grapefruit	If possible and desirable, some to Lord Knutsford's Home for Officers, Kensington, and some to the Star and Garter Hospital, Richmond.
. C. R. Chandler, Harry Watch	10 do	Any Hospital.
Mrs. W. W. Wynne, Mandeville	8 boxes Grapefruit	Military Hospital, Norbury, S.W.
	8 boxes Grapefruit	War Hospital, Dundee.
Miss. G. Glanville, Mile Gully	4 boxes Grapefruit	St. John's Ambulance Hospital, Bordogan Road Bournemouth, Hants.

FORTY-SECOND SHIPMENT.

The following War Gifts have been contributed and shipped to the United Kingdom, per the Jamaica Agricultural Society, during the fortnight ending 26th February:—

Donor and Address.	Gift.	Destination.
Mrs. W. W. Wynne, Mandeville	7 boxes Grapefruit	212 the Military Hospital, Norbury, S.W.

H. C. Bennett, Spanish Town	25 boxes Grapefruit	The Bristol Hospital.
Hugh Clarke, Sav-la-Mar	10 bags (about 1 ton) Sugar	Prisoners of war in Germany.

JNO. BARCLAY,
Secretary.

---:o:---

FORTY-THIRD SHIPMENT.

The following War Gifts have been contributed and despatched to the United Kingdom per the Jamaica Agricultural Society during fortnight ending March 12th, 1917:—

Donor & Address.	Gift.	Destination.
W. C. R. Chandler, Harry Watch	10 boxes Grapefruit	Any Hospital.
Fred. L. Myers & Son, Kingston	1 Case Books, (50 copies Triumphant Squalitone)	B.W.I.R. In France.
Officers of the 1st Battalion, W.I.R., per Major Collins, Camp	5 Cases Cigarettes (30,000)	2nd Battalion W.I. Regiment in East Africa on active service.
People of the Jamaica Evangelistic Mission, per Mrs. Johnston, Brown's Town	1 Case Cigarettes (10,000)	Channel Patrol Service.

We have also received the following gifts which were disposed of as noted:—

A. C. Westmoreland, Annotto Bay	4 Barrels Grapefruit	Warship in harbour.
Alex. Gordon, St. Ann's Bay	4 barrels Limes	do
The Misses Fisher, Mandeville	3 boxes Limes	Contingent Camp.
Maidstone Branch, (J. Henry, Alex. Welsh, Mrs. Eva Daniels, R. Foster, J. T. Wilson)	2 barrels Grapefruit	Sick Contingent men at Bumper Hall Hospital.

---:o:---

COMMENTS.

PRAEDIAL LARCENY.—Some recommendations made by this Society to deal with Praedial Larceny, which every now and then when times are hard to those who in times of plenty only live from hand to mouth, breaks out to a vicious extent, cover the following points:—

1. The hiring out of neglected Juveniles to approved families under rules as to treatment and under the supervision of the local Parochial Boards.

2. The establishment of Farm Colonies on suitable Government lands to be run on commerical lines, where praedial thieves after, say two convictions would be confined—(1) to work off the cost of their keep, (2) to work off the value of the loss to the person stolen from, and (3) the balance of the credit for his labour to be paid to him when it is determined that he can be returned to civil life.

3. The hiring to planters of such person who has no home or place to return to, under the supervision of the Government (like indentured coolies).

4. Incorrigibles to be kept permanently on the Farm Colonies.

Ordinary imprisonment is very expensive and has been proved to be no deterrent. The Farm Colonies need have no expensive buildings or supervision, and if private planters can make labour at 1/6 a day pay, the Colonies should not cost more than 9d. a day

BRANCH MEETINGS.—At the Half Yearly General Meeting in July of last year, the charge was made that interest in the Society was apparently waning, as attendance at Branch Meetings was falling away. This was a general assertion which applied only to certain districts and even in these was only a temporary indication; of that we were sure. It has been usual for interest in the Branch Societies to wane when times were hard, and to wax in times of prosperity. Now, however, times may be considered to be harder than ever they were, when we take into account that we have had hurricanes two years in succession, causing a loss of cash in bananas alone of two and a half million pounds, and causing scarcity of local food; war time on, causing scarcity of imported foodstuffs, war taxes on to pay for our Jamaica Contingents, and calls on our finances to furnish money for various War Funds and War Gifts.

Our Branch Societies have this year good attendances at meetings. We have noted meetings with very large attendances indeed, and more new local Agricultural Societies are being formed anxious to secure affiliation with the Parent Society than we fear we shall be able to grant affiliation to. We have never considered the position of the Branches as unfavourable, and we think that they have done excellent work and are in a better position to-day to do good work in agriculture than ever.

—:o:—

SELECTION OF COCONUTS FOR PLANTING.—In the JOURNAL for August, 1915, pages 332-333, we had an article on the selection of coconuts for planting, where we got the experience of Mr. Crum-Ewing which he wrote in the Kew Bulletin. The seed nuts he referred to were supplied to us from Belgium estate in St. Thomas-ye-East from which estate we have never varied in getting our seed nuts from about the year 1905, because on a first trial of seed nuts from there and other places, the Belgium nuts proved to be generally superior in size and germinating powers; furthermore the trees have always been reported to be healthy. We got these nuts for Mr. Crum-Ewing in the year of the long drought—1907, and despatched them by the Royal Mail Steamer to the Island of Nevis where they were planted out in a thrown-up sugar estate. Some commenced to bear in 1911, some in 1912. One tree 4 years old bore 40 nuts, but reaping in any quantity did not begin until 1913 when the trees were about 5 years and 3 months old. These nuts were of high grade and got the highest price in New York Market. The percentage of selection is usually 91%. This matter is brought to our mind by a recent visit paid to Belgium estate, as owing to the large amount of enquiry for seed nuts and the prevalence of Budrot disease in St. Thomas we desired to take every precaution that the seed nuts secured from our reference should be from trees in a vigorous healthy condition. We found this estate in first class order, the trees growing luxuriantly and nearly all bearing very heavily, and large nuts. The trees selected for seed nuts are all marked. We did not notice any signs of disease in any tree. We make this statement as we have considerable correspondence about seed nuts, and so many ask for full particulars—where we propose to get the nuts, etc., etc., so that they may be sure to get seed nuts

COCONUTS.—A correspondent in Panama writes us as follows:— "Our plantation is progressing finely. Those 3,000 seed nuts whic you got for us have made very handsome trees and the growth th past year of all our trees has been wonderful."

———:o:———

QUEEN BEES.—Owing to the alleged presence of the Isle of Wight Disease (so called because it started in the Isle of Wight in the South of England, spread to the mainland, and caused very serious loss among bees in the United Kingdom) among bees in various parts of the United States, the prohibition against the importation of Queen Bees from the United States of America remains in force.

———:o:———

GROUND PROVISIONS.—It is not often that what we call ground provisions, i.e., yams, sweet potatoes, cassava and cocoes, are grown on anything like a large scale. Most of the yams are grown on areas from an acre downwards, except in the parish of Hanover where yam growing has been a business. We do, however, know several who have grown as much as 5 acres of yams, year after year, and they do this business systematically taking up fresh land every year, or every other year, and always mulching heavily. Yams are an expensive crop to grow, but if the seasons are good and the praedial thief does not take too big a toll, the profits are substantial. We know one man who culitivates provisions from year to year on a large scale, and he has always made a specialty of this business (although only lately on so large a scale as now), so that he knows the different varieties to plant in different seasons and on different soils which will suit different markets. He writes us now:—"Between January and February this year, I have planted 21 acres of casava and 7 acres of sweet potatoes. I have just bagged off 200 bushels of gungo peas for sale and have nearly a ton of white yams ready for sale."

Large planters too have been planting out food crops this year because of the special circumstances that have arisen. No planter can hope to start growing yams on a large scale because of the difficulty of getting heads; but sweet potatoes are easily planted and we know of areas of from 10 to 20 acres, even 50 acres. There would have been a very large planting of cowpeas had we been able to supply the seed, but these peas were not to be got in the quantities wanted. There is also a very large planting of corn this year, but we have not been able to supply the quantity of selected seed corn that has been asked for. It is, however, a good indication that our continued advocacy of care to be taken in the selection of seed corn has taken effect because there has been a demand from the largest planter who asked us to book him for 4 or 5 bushels to the smallest cultivator who asked us to send on a quart. We could have sent out some hundreds of bushels had we had enough corn early enough.

———:o:———

COCOA.—Messrs. Wm. McKinnon & Co., Ltd., Spring Garden Iron Works, Aberdeen, Scotland, have issued a very handsome and complete catalogue of coffee machinery which we have received. We are advised that the firm are also issuing a companion catalogue on cocoa machinery.

This catalogue will be artistically got up, and it will contain some interesting comparative hints as to the advisibility of using mechanical appliances for the treatment and curing of cacao. It

GOATS.—An interested correspondent writes:—Now that people are roused again on the milk question, could not something be done to get a breed of milch goats established for the peasantry?

No use to have "Child Saving Leagues" unless food is provided. It is the lack of milk that is at the bottom of Jamaica's infant mortality, and goats are the best solution. I have just taken charge of a young infant, motherless, and such a hunt as I have had to get a goat to rear the baby. All I could procure is the ordinary half-pint-at-a-milking nanny. Goats are very scarce, and I can't find any trace of the imported blood anywhere. It needs a big effort, for it is a troublesome business, but the results justify any amount of pains taken. I don't believe in big herds of goats out here, now that the lands are taken up for cultivation, but everybody possible should keep one or two high class nannies, and the Branch Societies should each have a good ram. Now is the time, for the common goats are being killed for the sake of their skins, so there won't be so many of them to nullify the milch strains that should be imported. Can't you rouse up the subject again, and get the Child Saving Leaguers on to it? I have been "saving" half dead children for 24 years, so I am not ignorant of the subject. Milk, milk, milk, din it in, and only goats can solve the difficulty and not half-pint goats either. It will take two goats to feed my nursling at this rate, which is a waste of goat feeding, and double trouble.

* * * * *

This is one of the subjects that we have written about and talked about for a good many years.

We wrote a pamphlet on the subject, which has been pretty well distributed; we also imported rams of breeds of milch goats at a great deal of expense, and bred a few goats which gave two quarts of milk in the morning. Our efforts in this direction, however, were not carried on longer than 3 years as we were interrupted in the enterprise.

A good many of the Branch Societies, however, had rams from us of the best milch strain, but it takes more effort, skill, and application to keep up improvements with milch goats than with milch cows. Improvement is not so quickly obtained by crossing goats, as with cows, while reversion is quicker. The ordinary treatment given to goats all through the country is of no use to improve the strain of milch goats. The demand, however, in the country is not for rams of milch breeds, but for breeding mutton goats. The utility goat, like the dual purpose cow, is a matter of still greater difficulty than breeding goats of a pure mutton type, or pure milch type. We have tried it, so we know. The Santa Cruz Branch had a goat of the utility type supplied by us, which did much good in the district.

———:o:———

POULTRY.—We have had some paragraphs lately about the vaccine preparation in Hawaii for the treatment of yaws in chickens. Our request for a sample has been kindly complied with by the Veterinarian Department of Hawaii, and instructions dealing with the method of treatment have also been sent us.

———:o:———

SEED POTATOES.—The price of "Irish" potatoes for seed in the Northern markets has been steadily mounting. In the United States it is over $7 a barrel; and in importing we could never tell what the price of our next consignment might be. However, so far as seed

for Jamaica is concerned, we have come out fairly well, and we hope that everybody who has made up his or her mind in time to plant has been served. No use in these times waiting until ready to plant, and then ordering seed. Pre-war price was about 14/- a barrel here; our October price was 23/- per barrel; in December 28/- a barrel; in January 32/- a barrel; and our last oonsignment of 150 barrels, received early in March, was 42/- a barrel. For table purposes, potatoes have been selling in Kingston at 4d. a lb. and 50/- a barrel.

———:o:———

COCONUT BUTTER.—With further reference to our explanation on how to make this article, published in last JOURNAL, we repeat that it is expedient in these times for every one who can make it convenient, (and most people can everywhere), to make coconut oil, or preferably coconut butter—(1) for cooking, (2) for making cakes, and (3) where it is liked in the house in the place of dairy butter; it can always be used on toast at anyrate, if not as bread and butter. As there has been considerable correspondence with us on this subject, we give figures of another definite experiment for general information. It should always be remembered that the coconut "trash" or meal, is of great value at the present time when the price of grain is so high, especially for feeding young chickens, and if there is plenty of it, poultry, in general, also. We add some of the coconut meal to the horse food as corn is so dear, and calves fed by hand get some in their food also.

In this test, 12 very large nuts weighing 27 lbs., gave 3¼ lbs. butter, and the coconut meal left, weighed nearly dry, 7 lbs.

Twelve nuts delivered in Kingston, cost 2d. each, buying 50 at a time to get them wholesale; such nuts would cost 3d. each in the Kingston market at present. Where they were grown in St. Thomas in the East, they were 1½d. each for local sale.

Taking 12 nuts at 2d. each, the cost would be 2/-. Now, taking the result as 3 lbs. of coconut butter at 1/3 a lb. wholesale, would give 3/9. 7 lbs. coconut meal worth 3d. a lb. to us, but putting it at 2d. a lb., would be worth 1/2, the total value of both being 4/11. There is the cost of labour to deduct, but when this is home labour, it is not much. On a large scale, however, the labour and all expenses of manufacture, could not amount to more than 3d. a lb. The most expensive article in connection with a large out-put at present, would be the package to contain the butter. Under stress of present circumstances, however, when tins are so expensive, second-hand glass jars can be used.

As a home industry, the making of coconut butter at the present time is strongly recommended.

———:o:———

RATS.—The JOURNAL of December, 1916, only came to hand this day, Saturday, 10th inst (a bit late).

Re Rat trouble, I fall in with Mr. A. P. Hanson's advice published in the JOURNAL of above month. If I am permitted, I would like to make a slight addition which may be of use to those cultivators who suffer from these terrible pests.

When you make your sugar, (if you don't buy a tin for the purpose) punch holes in the bottom of the can or tin; the holes must not be too large, a 4 inch wire nail will do nicely; rig up this tin or can on something that will catch the molasses (nothing rats love more than mo

asses,) get some cornmeal and mix with the molasses, rub the mixture well between the palm of the hands until the meal return to its fine state, and as the Instructor advised. feed them first. Of course, he said two or three nights. I fed them for one week with good effect prior to poisoning.

A. How to entice them.—First, clear a bit of ground, say 18 inches square, dig it up and make it fresh, put about a tablespoonful of the mixture on this clean spot. I should have said don't forget to make the mixture quite sweet, but not clammy. After about the fourth feed which should be given at nights, if too much of the mixture is not put down, you will notice that they will be digging the ground which will be notice for you that your guests have brought several friends and want more food.

Now is your chance. *Poison them.* I saved several fields of sugar cane in St. Kitts by this method. If their bait prior to poisoning is palatable, they will not do much damage before they become victims.

I have heard several cultivators saying, the rats will not eat the poison, and go on destroying the field. Good reason, rats will not eat poison when its not given to them the proper way. In fact I know of several cultivators who put poison in their fields the same day it was bought and in the same state, and want the rats to eat it. Impossible! Rats are not fools and to kill them by poisoning or traps effectually, wants some understanding. They are too cunning for many men.

Mr. Hanson states, fields should be kept clean, quite correct. But where the trouble comes in, is when you keep your field clean and your neighbour keeps a foul one which becomes a depot for rats; the man with his clean field will find himself in a tight corner with his crop, but if every one would keep clean fields as the Instructor advised, half the trouble would be prevented.

The class of poisons quoted by the Instructor are good. I used them some years ago when I attacked an army of rats in St. Kitts. But since I came to Jamaica, I find that Benjamin's death to rats wants some beating, for the rats that taste thereof shall surely die.

JOHN D. LEAVY.

Gordon Town Branch,
12.3.1917.

———:o:———

SUGAR.—Reports state that there will be a large increase in the production of Sugar Cane in Porto Rico this year, although there is stated to be an actual decrease in the acreage of cane now under production. The good results are due to favourable seasons and an early start.

There is no doubt about it that Jamaica should have a record output this year.

———:o:———

DYNAMITE IN AGRICULTURE.—Two main series of experiments have been conducted with dynamite in Dominica. (1) to determine the effect of explosions of the soil among established lime trees, and (2) to determine the effect of using dynamite in making holes for planting. After a period of two years, it is stated, in the report of the Agricultural Department, that no advantage is to be observed in the treated trees in the first experiment, and the dynamited rows show no advantage whatsoever over the ordinary spade-made holes.

JAMAICA AGRICULTURAL SOCIETY.

BRANCH NOTES.

SPANISH TOWN (St. Catherine.)—A regular meeting of the [illegible] here on the 7th February, 1917. Present: Messrs. D. A. Aldred, President, in the Chair; Wm. Gentle, V.P.; C. Storks Soares, Treas.; Everard Lopez, Secretary; six members and one visitor. Matters arising out of the minutes were dealt with, and correspondence was read and discussed. The officers of the existing administration were re-appointed to serve in the ensuing year. It was decided that Mr. Mossman, the Agricultural Instructor for the parish, be invited to attend the next meeting to give advice and instruction as to the best methods to be employed in laying out cane cultivation; and in the event of his being unable to attend, he be requested to send such advice and instruction in writing. Five new members were elected. A Committee was appointed to revise By-Laws, and the meeting then adjourned

EVERARD LOPEZ, Secretary.

UPPER ST. JOHN'S (St. Catherine).—The usual monthly meeting of this Branch was held on the 13th February. There were present fifteen members, including the officers. The minutes of the last meeting were read and confirmed. Matters arising out of them were accordingly dealt with. A small Committee with the President as Chairman, was appointed to frame rules for the working of the Corn Mill. The Instructor mentioned that he obtained 2000 J 71 and 72 cane tops from Mr. Cousins for the Point Hill Branch. Arrangements were made to get them up. He also suggested the purchase of a corn sheller. After some discussion, it was agreed to purchase one. Miscellaneous matters *re* Roads and Journals, were also brought up by members. The Authorized Persons presented their reports. Next followed the Instructor's talk *re* the planting of quick growing crops, and the cultivation of vegetables. Other minor matters were brought up, and dealt with, after which the meeting terminated with the singing of the National Anthem.

E. T. HAMILTON, Secretary.

BROWN'S HALL (St. Catherine).—The regular monthly meeting of this branch was held in the Schoolroom on Wednesday, 14th Feb. Present, Rev. G. L. Young, President; Messrs. Geo. Thomas, V.P.; H. L. Mossman, J.P., Agricultural Instructor; 4 members, Secretary and six visitors. The Instructor gave a very timely and useful address on the planting of food crops. He advised how corn and peas can be procured for planting and the Secretary was instructed to write to Mr. Barclay and order a certain quantity. On his next visit Mr. Mossman will give a demonstration on Mr. John Myton's cultivation on the pruning of coffee and cocoa. One Authorized Person presented his report and the other resigned. At this stage, the meeting adjourned.

J. M. COUSINS, Secretary.

DUANVALE (Trelawny).—A special meeting of this Branch was held on Monday night, 12th February, 1917. Present: Hon. Guy S. Ewen, M. Rennie, Esq., Agricultural Instructor, the officers of the Society, and about 200 other persons. The Chair was occupied by Mr. E. I. Hawkes, M.P.B., Vice-President. The meeting was specially called to discuss the Food Question. Very fine, helpful and encouraging addresses were given. All seemed resolved to increase and improve their quantity of food-stuffs cultivated and take all possible precautions against disaster in future. A very successful meeting terminated with the singing of the National Anthem.

L. U. WELSH, Secretary.

GORDON TOWN (St. Andrew).—At the regular meeting of the Gordon Town Branch Agricultural Society, held in the Schoolroom on the 26th December, 1916, there were present: The President, Vice-President, Treasurer, Secretary, Asst. Secretary, and 34 other members. The item for discussion was the necessity of getting a J.P. for the district. No definite conclusion was arrived at, and the matter was then postponed for a special meeting which was called on the 31st January, 1917. Among those present were, President, Vice-President, Treasurer, Secretary and Asst. Secretary, with 32 members and visitors. The minutes of the regular meeting were read, so as to give the necessary information to members as to the special matters which the meeting was called to discuss. After a lengthy discussion about the J.P., it was ultimately decided that a committee be appointed to draft a letter to be sent to the Custos again pointing out to him the necessity of recommending a gentleman to fill the vacancy which now exists. It was decided that Auditors be appointed to audit the accounts of the Society, and Dr. R. A. Davidson and Mr. J. Polack were appointed. The Instructor, Mr. Hanson, then gave his usual address, speaking more particularly on recruiting, emigration and

increased production of foodstuffs. A lengthy discussion on some of the points dealt with by the Instructor followed. A hearty vote of thanks was accorded to him for his clear and instructive address. An article was read from the Journal by Mr. I. Henry. A vote of thanks was also given him, and the meeting adjourned by singing the National Anthem. L. G. JOHNSON, Secretary.

CAMBRIDGE WOODFORD (St. Andrew.)—The monthly meeting of this branch was held on the 1st February. Among those present were: Rev. S. T. A. Jones, President; R. Nelson, Esq., Vice-President; A. P. Hanson, Esq., Instructor; and the Secretary. Various matters in connection with the working of the Society were dealt with, especially those in reference to Authorized Persons. The delegate to the last Half Yearly Meeting gave his report. A vote of thanks was accorded him. The Instructor delivered a short address, in which he urged on the members to do the best they can, and, as an encouragement, cited many instances of what is being done in other parts of his district. He purposed visiting Maryland on the following day. The Secretary was instructed to make arrangements for the purchase of a Blick Multi-copier from Fears, Ltd., Bristol. R. A. CLARE, Secretary.

DALLAS AND CONSTITUTION HILL (St. Andrew.)—The usual monthly meeting of this Branch of the J.A.S. was held at the Constitution Hill Methodist School Room, on the 9th February, 1917. There were present: The Chairman, Vice-Chairman, Secretary, Instructor, and 12 other members. The minutes of the previous meeting were read and confirmed. As matters arising out of the minutes, the question of Loan Banks came up. It was then agreed to hold the matter in abeyance for some time. The question of crops next came up and was fully discussed. At this juncture the Society received with regret the resignation of the Secretary. He was, therefore, heartily thanked for his past valuable services. J. T. BROWN, Secretary.

HANOVER.—This branch held its first quarterly meeting at the Court House, Lucea, on February 10th, when thirteen members, the Instructor and two visitors were present. Rev. B. C. Lumsden (Vice-President) took the Chair. A resolution was unanimously carried to request the removal of the war export tax on logwood and so assist in removing the depression in the logwood trade, a trade which gives so much work to the labouring class. The Instructor informed the members that in Westmoreland some estates were purchasing syrup from cane farmers, and the Secretary was instructed to write Mr. Charley to ask if he would entertain such a scheme at Kew. Another resolution was carried nem con, stating that this branch is convinced that unless something is done to ameliorate the condition of the working class, the best interests not only of the labourers, but of the whole island, will be sacrificed; and it was decided to request the Parent Society to have the question raised and agitated in whatever way may seem best. It was decided to nominate J. T. Miller as an Authorized Person. On the Instructor bringing up the question of Co-operative Societies, it was decided to appoint a committee to look over the rules of one of these Societies now working in Westmoreland, and to report on the matter at the next meeting in May. It was agreed to hold a meeting of this Committee on March 17th, when the Instructor will be in this district, and will attend to explain any matters that are not clear. The Secretary reported that there was £15 12s. 3d. at the credit of the Society. T. J. LLOYD, Secretary.

GIDDY HALL (St. Elizabeth).—The last meeting of this branch was held on Friday, February, 2nd, 1917. There were present, Rev. J. Maxwell, Chairman, and 18 members. After the usual preliminaries were discussed, arrangements *re* the Corn Mill bought were made. We next discussed plans which would help to suppress the alarming growth of praedial larceny in the districts around, and the work of our Authorized Persons was reviewed. The President promised to query several matters in this connection with which we are not satisfied at an early date.
G. A. HYLTON, Secretary.

LAMB'S RIVER Westmoreland.—The annual general meeting of this Branch was held at Mt. Hermon on Friday, 2nd February. Rev. A. W. Ross presided. Minutes of the previous regular meeting were read and confirmed, and points arising out of the same discussed. There were 37 members present, and 13 visitors. The President reported that he received a letter from the Matron of the Beckett's Military Hospital, England, respecting the receipt of the barrel of arrowroot sent as war gift from this Branch, and the thanks of the authorities, and their appreciation of the gift. A petition to the Government in respect to the completion of the Coffee Grounds road was read and adopted, and the Secretary was directed to forward the same to the Hon. Colonial Secretary in due course. Mr.

Briscoe gave a comprehensive report of the Half Yearly General Meeting held i January. A vote of thanks was accorded Mr. Briscoe for his valuable report an advice. The Treasurer's report for 1916 was given and adopted. It showed balance at the credit of the Branch of £1 17s. 3d., plus a little over £20 in the Saving. Bank. As each member was not supplied with a copy of the rules of the Branch, the rules were read by way of a reminder to all present. 13 new members were proposed, and duly elected. Next followed the election of officers for 1917. Mr. R. F. Williams was elected President for 1917. Rev. A. W. Ross, Vice-President; Messrs. C. W. Whittingham, T. A. Malcolm and U. L. Brown, Vice-President, Treasurer, and Secretary, respectively. Messrs. J. H. Loftman, C. K. Chambers, C. L. Stevens, G. B. Fennell, and J. E. Lawrence elected as Executive Committee. Mr. Briscoe moved a vote of thanks to the officers of the Branch for their services during 1916, and hoped for future usefulness. At this stage of the meeting, work was fixed for next meeting, which will be held on Friday, 30th March, as follows:—(a) Discussion on Jippi jappa hat industry; (b) Discussion on extract from the Journal, to be led by Mr. J. H. Loftman; (c) Discussion on Worms in Canes, to be led by Mr. Briscoe. The meeting then terminated.
U. L. BROWN, Secretary.

NEW ROAD (Westmoreland.)—The monthly meeting of this Branch was held on the 16th inst. There was a large turn out of members. The Instructor was present. He had been visiting holdings and school gardens in the district since the 13th. A lot of very important business was got through. The meeting decided to buy up all the corn available, and to have it properly dried and stored in order to sell again later on, at a small margin of profit, when the food supply of the district shows signs of a deficiency. To this end a strong working Committee was appointed. Mr. Bailey, the Delegate to the last Half Yearly General Meeting, was hindered by his official duties from attending said meeting. The Instructor, therefore, gave a digest of the proceedings and was heartily thanked therefor. The Instructor, on urging on the attention of members the great necessity there was for planting largely all kinds of native foodstuffs, was assured that this was being already done, as in this planting crusade the Branch was having the able co-operation of the Clergy and Magistrates of the district.
H. C. GOODIN, Secretary.

COMFORT HALL (Manchester.)—The first bi-monthly meeting of this branch for 1917 was held on the 9th February. Eighteen members were present, also two visitors and Mr. Thos. Powell, the Agricultural Instructor. As business arising out of minutes, Mr. McCausland reported that owing to press of recruiting work he was unable to attend last half yearly meeting. Members reported that since last meeting conditions of the weather have so changed that the crops of corn and peas have all been spoilt, and now there is none to be had for the spring planting. It was decided that two bushels of corn be bought for distribution among the members The Secretary was asked to make the necessary enquiry. The following subjects were discussed and dealt with:—(a) The requests *re* the amendation of the Law *re* the purchase of dyewoods. (b) Labour Co-operation; (c) Mr. Powell reported on the chief points of the general meeting, especially that of food crops. No Authorized Person reported. It was decided to remind them of their duty and that at the next meeting they must report or their services will be dispensed with. The Society's Ram goat was reported sold. The Secretary was instructed to write to Mr. Fray to inquire of the prices of young full or ¾ bred rams. Other matters were dealt with, and the meeting adjourned to 2nd Friday in April, when the annual meeting will be held.
R. A. MUNROE, Secretary.

MAIDSTONE (Manchester.)—The regular bi-monthly meeting of this branch came off on Friday afternoon, 16th Feb., when the Instructor for the district and fifteen regular members were present. The minutes of previous meeting were read and confirmed, and it was decided that a vote of thanks to the Parent Society should be sent by the Secretary for free gift of potatoes; (b) that the Parochial Board be also written to, so as to learn what steps the Government have taken to mitigate suffering of poor around caused by hurricane of August last. The delegate to the Half Yearly General Meeting here presented his report which was exhaustive and interesting. He received the usual vote of thanks. Arising from the report, members were asked to exhibit more co-operation during this prolonged war. As a result (1) The Secretary was empowered to get from the Secretary of the Parent Society half dozen boxes for sending grapefruits to the wounded fighters; (2) The members to collect walking sticks. The Instructor agreed to spray all cattle suffering from ticks, provided these are carried to convenient centres. Everybody was unanimous

hoped that at his next visit he would have a chance of demonstrating in some of the fields of the district. He left at this juncture as he had to journey over steep rough roads in the dark. Messrs. Cowell, McPherson and Morton were appointed to look up for important and interesting facts in the Journal, for presentation at next meeting, and Authorised Persons were warned to appear and report. The meeting adjourned with the National Anthem. T. E. CLARKE, Secretary.

PORTLAND (Central.)—The regular monthly meeting of this Branch was held in the St. Margaret's Bay Schoolroom on January 27. Present: Messrs. I. S. Williams (Vice-President), in the Chair; E. A. Gunter (Agricultural Instructor); and 9 members. The minutes of the last meeting were read and confirmed, and three new members were elected. Mr. L. J. Morgan, one of these, was unanimously elected Secretary of this Branch. The following subjects were discussed and dealt with:—Authorized Persons, the getting of a corn mill for the Branch, the planting of corn in the surrounding districts and the necessity for the planting of food crops; the use of the grind stone by members of the surrounding districts, a rat campaign, work on the roads, the date of the monthly meetings. It was definitely arranged that the meetings should be held on the fourth Saturday of each month at 2 p.m. *The Instructor gave notice of visits for the week ending February, 24.* A hearty vote of thanks was then accorded to the Instructor, to which he suitably replied. The meeting was then brought to a close by the singing of the National Anthem.

L. J. MORGAN, Secretary.

BELVEDERE (Portland.)—This Society met on the 9th February. Since the last meeting in November, every fixture has been washed out. The attendance was not encouraging. At the conclusion of the reading of the minutes, Mr. Lowe moved their adoption. Correspondence, though lengthy, was patiently handled. Subjects discussed:—Price of corn, the destruction of peas and beans by the heavy rains, the state of the crops of yams and bananas. A vote of thanks to the Parent Society for its kindness in sending seeds, etc., was unanimously carried, as was also one to Mr. J. Gray for free carriage of cane tops. Rats came in for a lively discussion, *also planting by Moonlight. Pages 486 and 492 of last Journal (Dec.) on rats were* read and commented on by the Secretary.

R. J. LAWSON RICKETTS, Secretary.

FAIRY HILL (Portland).—The usual monthly meeting of this Branch was held on the 13th February. There were present, Mr. E. A. Gunter, Instructor; Mr. H. J. Cato, President, Secretary and 13 members. The minutes of the previous meeting were read and confirmed. On the motion of the President, the acting Secretary was permanently appointed. Arising out of the minutes were matters relating to grind stone. After discussion it was agreed that the expenses incurred in its carriage be paid from the Society's funds until the penny per member be collected. Correspondence was then read and discussed. The Instructor informed the meeting that the names of the men who had been recommended as Authorized Persons had been published in the *Gazette* of the 25th January, 1917. *After a lengthy* discussion it was agreed that the hour of meeting be changed from 6 p.m. to 8 a.m., so that the Instructor might be able to give demonstrations. The meeting then adjourned. FRANK HARRISON, Secretary.

SWIFT RIVER (Portland).—The regular monthly meeting was held on 15th February at Mt. Olivet, at 5 p.m. The President took the Chair. There were present eleven members, also the Agricultural Instructor, Mr. E. A. Gunter. Minutes of last meeting was read and confirmed Owing to rain there was no meeting held in January. The President then gave a summary of the discussions on various subjects dealt with at the Half Yearly General Meeting. The Agricultural Instructor spoke next on the same subject but dealing with other points. Items to be dealt with at next Meeting: Corn Mill, Authorized Persons, Yams—Renta and Trinidad—Penny Bank, Mr. W. Curate to read from Journal. The President to act as Treasurer protem. The National Anthem brought meeting to a close.

D. N. PARKER, Secretary.

BLACKWOODS (Clarendon.)—This Branch met at Mt. Hume on February 1st. Mr. R. A. Thomas, Chairman, Mr. Schleifer, Instructor, and eleven other members were present. Mr. H. Thomas having left the district, Mr. P. E. Carey was appointed Secretary. The Instructor read an article from the Journal on Cocoa Pruning and spoke on corn growing. Praedial larceny came in for much discussion when the Authorized Persons gave their reports.

with them more efficiently than they are being dealt with at present. Next followed a lecture on the growing of Irish potatoes by the Instructor. It was well received and a hearty vote of thanks was accorded him. Mr. Joseph Powell here spoke on practical co-operation and instanced the forming of an Agricultural Loan Bank. Members did not see with him, however. The Instructor shewed several weak features in connection with a Loan Bank, and rather than wrecking a good venture, members were advised to fall in with the Loan Bank at Balaclava, which was doing well. The two Authorized Persons present made favourable reports. After fixing Friday, 20th April, for next meeting, this one adjourned.

J. T. WILSON, Secretary.

TRINITY VILLE (St. Thomas).—The regular monthly meeting of this branch was held on 2nd February, 1917. There were present: Messrs. W. A. K. Can, President; three members, and J. T. Edman, Secretary. The minutes of the previous meeting were read and confirmed. Correspondence was read and dealt with. It was decided that the amount in the Government Savings Bank be withdrawn and lodged in the Trinity Ville People's Co-operative Bank, Limited. The meeting then adjourned.

J. T. EDMAN, Secretary.

SOMERSET (St. Thomas.)—The regular monthly meeting of this Society was held on the 6th Feb., 1917, at the usual place. There were present, W. B. Wilson, Esq., presiding; 17 members and J. A. Telfer, Secretary. Minutes read and confirmed, and matters arising therefrom discussed and dealt with. The delegate to the Half Yearly General Meeting presented his report. Arrangements were made to form a Penny Bank in connection with the Branch. Members complained that since the formation of this Branch, notes only appeared in the Journal twice and pray that this may be attended to better in the future. A very interesting meeting was then closed by the singing of the National Anthem.

J. A. TELFER, Secretary.

ARCADIA (St. Thomas.)—The regular monthly meeting of this Branch was held on February 12th, 1917, at the Government Schoolroom. There were present: Rev. J. A. Bowen, in the Chair; 10 members, Saml. A. Vassall, Secretary, L. A. Wates, Esq., Instructor, and 4 scholars, visitors. The minutes of meeting held December 11th, 1916, were read and confirmed. Arising out of minutes was the plan to start a model plot to plant corn, and it was decided that each member prepare half square chain of land for a competition, competitors to receive seed corn for planting at March meeting, and the closing time to be at harvest. The value of the 1st, 2nd and 3rd prizes to be decided upon at next meeting. The Instructor here spoke at length as to the great need of planting plenty of food stuff in order to prevent a crisis should America enter the war. The Rev. J. A. Bowen followed, and all present were greatly benefitted by the good advice given by both gentlemen. The Instructor further pointed out how useless it is for members to promise and do nothing. He gave a parcel of cane tops B 214, to the members present, and is down to give a lecture on corn growing next meeting, viz., March 12th, 1917. This brought the meeting to a close at 6.30 p.m. Members will please note that our Branch meets on the second Monday of every month at 4 o'clock p.m.

SAML. A. VASSALL, Secretary.

THORNTON (St. Thomas.)—The regular monthly meeting was held in the Schoolroom at 6 p.m. on the 14th inst. Ten members were present. Mr. Daniel Ferguson, V.P., presided. It was decided to put up the grindstone for the branch on Saturday, 24th inst. Mr. A. Williams led a discussion on the best method of curing seed corn. It was agreed that the best method was to select the best ears, and allow them to be well dried in the field and store them on the cob until ready for planting. Mr. D. Ferguson reported that no cases of larceny came to his notice.

JAS. BROWN, Secretary.

WILMINGTON (St. Thomas.)—The regular monthly meeting was held on 15th February. There was a large attendance of members and visitors, and Mr. L. A. Wates addressed them. Mr. Kenneth McPherson was voted to the Chair, as the President of the Branch, A. Mordecai, Esq., was unable to attend owing to pressure of business. Mr. Wates' lecture was long, instructive, and interesting. Among other things he urged very strongly the planting of more foodstuffs and the more extensive rearing of domestic animals, and more vigorous and intelligent methods of attacking insect pests. The Branch not having been represented at the last General Half Yearly Meeting, the Instructor gave a very clear summary of its proceedings. A vote of thanks was accorded Mr. Wates, who suitably replied, and

MOCHO (Clarendon.)—The Mocho Branch met on Friday, 2nd February. The Instructor, the officers of the Society and 24 other members were present. The President addressed the meeting on the benefits to be derived from the Society, and the Instructor on the growing of food stuffs. The delegate, Mr. Barnes, then gave an interesting account of the Half Yearly General Meeting. Mr. Muirhead's reply to the petition re obtaining land was read. Mr. Muirhead did not see his way to renting the land that was asked for but would rent other parts if desired. The meeting adjourned. S. A. FRANCIS, Secretary.

MAHOE HILL (Clarendon.)—The Mahoe Hill Branch met on Monday, 5th February. The President, Mr. Turner, the Instructor and 14 members were present. It was decided to send a petition to His Excellency the Governor, praying for the opening of the road long ago surveyed. The Secretary recommended the appointment of Wm. S. Robotham as an Authorized Person. The Authorized Persons wearing their badges gave their reports. It was agreed that a letter be sent desiring the appointment of Rev. E. A. Bell as a J.P. The Instructor read from the Journal and also spoke on the planting of foodstuffs. The meeting adjourned.

C. J. ROBOTHAM, Secretary.

CROOKED EIVER (Clarendon.)—This Branch met on February 6th. The School-room was filled with memberws and visitors. The Instructor spoke on corn and yam planting.

RED HILLS (Clarendon.)—This Branch met on Tuesday, 6th February. Twenty-two persons were present. There was also a demonstration in the School Garden by the Instructor. J. WATTS, Secretary.

MAY PEN (Clarendon.)—The May Pen Branch met on February 8th. In the absence of S. DeRoux, Esq., Rev. W. J. Jacobs presided. Mr. Schleifer submitted a suggestive Prize List for the Grain Show and Fair to be held in September, also an estimate of income and expenditure. The Show Committee was empowered to print the list and make all necessary arrangements. The Instructor gave valuable hint on corn growing and on the use of Cooper's Cattle Dip. Messrs. A. Gordonr and C. Scott became members. Rev. Jacobs urged on the members to put more energy into the Society. The meeting adjourned. S. T. ROBINSON, Secretary.

SMITHVILLE (Clarendon.)—This Branch had a field demonstration in the School Garden by the Instructor and its meeting on February 9th. Mr. J. Deacon presided. The Instructor addressed the meeting, touching upon the latest development in the war, the food question, the Grain Show to come off at May Pen, and especialyy the growing of corn on the bset lines. Mr. H. Peck in thanking the Instructor, pointed out that his difficulty lay in want of capital and good lands.

J. EDWARDS, Secretary.

PROSPECT (Clarendon.)—This Branch met on February 12th. The President being ill, Mr. H. Thomas presided. Mr. Benjamin proposed that a boar be bought for the Society. The Instructor pointed out the difficulty of keeping a boar. The matter was referred to next meeting. A resolution was sent to the senior J.P., asking him to recommend Rev. E. A. Bell to be a J.P. Mr. McLean spoke strongly on the praedial larceny evil, and on the shortage of seeds and plants in general. The Instructor addressed the meeting on the production of food.

F. R. RICKETTS, Secretary.

BULL HEAD BRANCH (Clarendon.)—This Branch met on Monday, 19th February. Sixteen members were in attendance. The Instructor spoke on corn growing.

J. F. ROBINSON, Secretary.

KELLITS-CHAPELTON (Clarendon.)—This Branch had its meeting in the Unity Church on February 22nd. In the absence of the Chairman, Mr. Robotham presided. About 20 persons were present. The Instructor, on his way home from Far Enough, came in late. The purchase of a corn mill was discussed. The Chairman explained that as Denbigh estate could not take the syrup at present, Mr. Radlin had to suspend buying. This was regretted. Poultry rearing was next discussed, the Chairman and several other members giving their views. It was pointed out that eggs were more profitable than chickens, consequently good laying strains should be kept. A cross between the Cuban Game and the Minorca was recommended. The Instructor exhorted the members to continue putting in catch crops and dwelt specially on corn growing, this being a good corn district.

T. SIMPSON, Secretary

FAR ENOUGH (Clarendon).—A very interesting meeting of this Branch was held in the Good Hope Schoolroom on the 22nd day of February, 1917. There were present, Mr. S. A. Schleifer, Agricultural Instructor, the President, Secretary, Treasurer, ten other members and two visitors. The Secretary reported that in consequence of rain, no meetings were held for the months of December and January, for lack of a quorum. Matters arising out of the minutes of a meeting held at Rodon Hall in connection with this Branch on the 27th October, 1916, were discussed and dealt with. General correspondence was also read and discussed. The Instructor then spoke, pointing out the absolute necessity for an increased local food supply. A vote of thanks for his instructive address was accorded him. Members agreed that the annual subscription be raised from 1/- to 1/6 per annum. Other matters were dealt with, and the meeting adjourned till the last Thursday in March. This meeting to be held at Rodon Hall. J. C. ROBERTSON, Secretary.

BRANDON HILL (Clarendon).—This Branch met on Monday, 26th February. Twenty persons were present. The bad condition of the road was discussed. The Instructor addressed the meeting on corn growing and announced the proposed May Pen Show. E. LEWIS, Secretary.

CROFT'S HILL (Clarendon).—This Branch met on February 28th. Twelve persons were present. The Chairman, Rev. G. Turner, announced that a grant was made for the Seven Ground road. The Instructor showed samples of corn grown in his field from selected seed corn as compared with those grown from corn not selected. There was an interesting discussion. R. EASY, Secretary.

TRYALL HILL (St. Mary.)—Regular monthly meeting 29th Jan. D. N. Roper, V.P., presiding. Meetings of last meeting read and confirmed. W. Roper elected a member. W. Roper nominated as Authorized Person for Annotto River district. Letter from Colonial Secretary re Crown Lands Hydes patent was read. The agenda of the Half-Yearly Meeting of the Parent Society was discussed. The regular date of holding the Branch Meeting was changed from the 1st Tuesday to the 1st Monday. The Instructor addressed the meeting regarding the Half-Yearly Meeting of the Parent Society. Planting and preserving of foodcrops. Cocoa Cultivation Competition. A. A. CONSTABLE, Secretary.

BAXTER'S MOUNTAIN (St. Mary.)—Tuesday, 30th January. Present, eight members, a visitor, the Secretary and the Instructor. Minutes read and confirmed. Mrs. Mary Cacey was elected a member. Decided to ask O. B. Casserly, Esq., to allow Branch to nominate him to the Custos for the position of J.P. To support cialm of Uriah Jackson, Authorized Person. To instruct all Authorized Persons connected with this Branch that failure to attend or report to three consecutive meetings of the Branch will cause them to be recommended for dismissal. Officers for ensuing year elected. Authorized Persons present, 2. One arrest and conviction reported. Aaron Harris and Larklin Strachan nominated at Authorized Person The Instructor addressed meeting on the subject of Half-Yearly Meeting. Necessity to increase the production of home grown crops. F. A. DEAN, Secretary.

MT. REGALE (St. Mary.)—Regular monthly meeting, 2nd February. Present, 11 members. The Secretary reported no seeds yet received. Authorized Persons reported 1 conviction. Delegate gave his report on the Half-Yearly Meeting, paying special attention to the welcome by His Excellency the Governor to the Delegates. Secretary stated that he had received no reply from the Parochial Board to the Petition from the Branch. Secretary instructed to again communicate with the Board. B. T. ATKINSON, Secretary.

WINDSOR CASTLE (St. Mary.)—At the monthly meeting of this Society held on the 6th Feb., 1917, there were present: Mr. W. Cradwick, Agricultural Instructor, 19 members, and the Secretary; there were also a few visitors. As the Chairman was unavoidably absent, Mr. Lopez was asked to take the Chair. The minutes of the previous meeting were read and confirmed. A new member, who was also appointed an Authorized Person, was elected. Correspondence was read and dealt with. The Instructor then addressed the meeting on the subjects dealt with at the Half Yearly General Meeting held in January. He was accorded a vote of thanks. After a brief discussion, the subject of getting a corn mill for the use of the Branch was left over for the next meeting. The Instructor gave notice of demonstrations to be given at Messrs. Hyatt's and Gouldbourne's holdings. The date for the next meeting was fixed, and the meeting adjourned. H. A. WHITE, Secretary.

ALBION MTN. (St. Mary.)—Regular Monthly Meeting held in the Albion Mtn. School yard February 14th. Present 12 members. B. Byfield, 2nd V.P., presided. Minutes last Meeting read and confirmed. Secretary instructed to write to the Supt. Parochial Roads suggesting that Mr. B. Byfield should meet him on road 21 on the 20th inst., regarding repairs. Authorized Persons presented their reports. A new member elected. Delegate to the Half-Yearly Meeting reported. He assured the Branch that the Meeting was a splendid one laying particular stress on the resolution *re* registration of titles. The Delegate's report was highly appreciated. The Instructor addressed the Branch on the subject of growing Food Crops for export and to supply our own needs which promise to be very great on account of the WAR. Mr. Robinson mentioned that Cassava suffered from disease. The Instructor promised to enquire into it. It was resolved that the Branch approach all the other Branches in the pairish in with regard to facilitating Factories for preserving bananas, and the growing of food crops. T. A. GRAY, Secretary.

BENBOW (St. Mary).—Regular monthly meeting Friday, February 16th.. Present, 51 members, including the President, V.P., Mr. Evelyn, the Instructor, and the Secretary-Treasurer. Minutes of last meeting read and confirmed. Mr. Dougall E. Brown was elected a member. Correspondence read and discussed. Resolutions were passed regarding the destructiveness of rats and the methods to be adopted for their extinction. (2) Best way of investing the funds of the Branch. (3) That the Secretay re-open correspondence with the Hon. Custos in *re* appointment of a J.P. for the locality. (4) Introduction of the Plymouth Rock breed of fowls. The Instructor addressed the meeting regarding exporting food to England and our own necessities. It was resolved that we can supply sweet potatoes in large quantities in 6 month's time, delivered at Linstead at 6/- per 100 lbs.

H. G. BOOTH, Secretary.

BAXTER'S MOUNTAIN (St. Mary).—Regular monthly meeting held in Schoolroom 20 Feb. Rev. W. E. Evelyn, President, occupied Chair. Sixteen members present. Minutes read and confirmed. Authorized Persons presented reports. Mr. L. I. Goffe was asked to read Governor's Address at the Half Yearly Meeting., which he did. Rev. W. E. Evelyn thanked Branch for sending him up as Delegate to Half Hearly Meeting, and spoke on several points which had been discussed there. President said outlook for canes very good. Cane cultivation also stronger than banana. He encouraged members to plant canes. President suggested that as flood rains destroyed crops of peas and corn, Secretary write Mr. Barclay at once asking if he can give any help in seeds for the spring planting. The meeting adjourned.

F. A. DEAN, Secretary.

GUY'S HILL (St. Mary.)—Regular monthly meeting St. George's Schoolroom. Present, W. H. W. Westmoreland, presiding, 16 members, 2 visitors, the Instructor and the Secretary. Meeting opened with Prayer, Minutes read and confirmed. Letter from Mr. Barclay read to the effect that seeds ordered could not yet be supplied. The Secretary, who was a Delegate to the Half-Yearly Meeting reported on that event. The Instructor supplemented the report. Authorized Persons presented their reports. Instructor spoke at length on the present food supply and the need of exertion on our part to prevent starvation in the future. The question of supplying bananas for chips or figs was thoroughly discussed. Members were of opinion that the greatest hindrance to the production of food stuffs was praedial larceny. The meeting was very interesting and instructive and was made so chiefly through the subjects of vital importance introduced by the Instructor. A hearty vote of thanks was accorded him by the meeting. One new member elected.

W. E. WATSON, Secretary.

Notes have also been received from the following Branches, but have not been published owing to lack of space:—Arcadia (St. Thomas); Baxter's Mountain, Broadgate (St. Mary); Porus (Manchester); Glengoffe (St. Catherine); Green Island (Hanover); and Guy's Hill (St. Ann).